

TO: LAND CLEARING CONTRACTORS & PROSPECTIVE OPEN
BURNERS

FROM: MEMPHIS & SHELBY COUNTY HEALTH DEPARTMENT
POLLUTION CONTROL

RE: STANDARD OPERATING PROCEDURES FOR ISSUANCE OF AN
OPEN BURNING PERMIT IN SHELBY COUNTY

Open burning in Shelby County is prohibited. Exceptions can be granted under specific conditions which do not interfere with the maintenance of acceptable air quality or create a public nuisance.

The Health Department's Air Pollution Control Section operates under Memphis City (16-50) or Shelby County (3-16) codes, and works in conjunction with local Fire Departments in issuing permits. At land clearing sites, temporary permits for the controlled burning of waste trees and brush can be issued. Burning this material is environmentally and economically preferred over disposal by landfilling.

The Fire Departments are concerned with preventing the spread of fire and potential fire hazards to nearby citizens. The Health Department is interested in minimizing the amount of smoke and fly ash released into the air which also impacts nearby residents.

(1) PERMITS

To burn in Shelby County, outside incorporated areas, contact the Memphis & Shelby County Health Department at (901)544-7349. A minimum 24-hour advance notice is requested and only a Health Department permit is required. We will schedule a permit inspection time with the Shelby County Fire Department.

To burn inside the Memphis City Limits, two (2) permits are required. First, obtain a permit from the Memphis Fire Department at (901)320-5401. The City of Memphis requires 48-hour advance notice to schedule a permit inspection and their fee is fifty dollars (\$50.00) or seventy-five dollars (\$75.00) for a 24-hour notice. Other incorporated areas of Shelby County may require an additional permit to be issued by their city fire department. Permits are currently required by the City of Collierville, twenty-five dollars (\$25.00) and the City of Germantown, twenty-five dollars (\$25.00). Incorporated areas include: Arlington, Bartlett, Collierville, Germantown, Lakeland, and Millington. After obtaining the appropriate city permit, contact the Health Department at (901)544-7349 to schedule a permit inspection. Efforts are made to make this a joint Health and Fire Department inspection.

The Air Pollution Control's Burning permit fee, for either the City or County, is one hundred dollars (\$100.00) and is required at the time of permit issuance. Please make

check or money order payable to “SHELBY COUNTY GOVERNMENT”. Cash may be accepted at the discretion of the inspector.

If you are uncertain about the jurisdiction of the area where you are planning to burn, contact the Health Department at (901)544-7349. Information regarding nearby streets, cross streets, direction, and distance will help determine the exact location of the burn site. If the location is remote and cannot be adequately identified or located on our maps, the clearing contractor will be asked to meet the inspector at a nearby location, such as an identified cross street, and the inspector will accompany the contractor to the site.

The Health Department permit is valid for thirty (30) days following the inspection. If weather conditions prohibit burning for a significant period during those thirty (30) days, a short extension may be granted, if requested, **before the permit expires**.

Only trees and brush from the burn site may be burned. Material may not be hauled in from other sites. Other materials including buildings, construction debris, furniture, plastic, tires, and roofing material **must not be burned**.

(2) BURN PIT SPECIFICATIONS

The Air Curtain Destructor (blower) blows a sheet of air across the top of the pit to increase burning efficiency and reduce smoke and fly ash emissions. The air curtain's nozzles are slanted so they impact about three (3) feet below the surface on the side opposite the blower. The air curtain does **not** blow directly down into the fire. In a properly operating pit, the air current rolls under and oxygenates the fire for more complete combustion (see Figure 1). The pit walls must be vertical (not sloped or slanted). The pit must be no more than twelve (12) feet wide because the air stream must reach the far side. A pit width of less than twelve (12) feet should be used for smaller air blowers.

The pit length is determined by the length of the air curtain plenum (blower manifold). The plenum should be centered on the pit and the pit length can extend up to a maximum of five (5) feet beyond each end of the plenum.

The pit must be at least ten (10) feet deep. Pit depth is determined by available digging equipment and the water table. A pit cannot be permitted where groundwater is encountered during the construction. Deeper pits usually burn better.

(3) PROCEDURE FOR THE SCHEDULED INSPECTION DAY

Prior to the scheduled inspection, construct a pit according to the permit requirements. The pit must be partially filled with trees and brush. **Do not overfill**. An overfilled pit has material above the sheet of air which results in blockage of the air flow and excessive smoke emissions.

After the inspector approves the pit's dimensions and position, diesel fuel may be used to ignite the contents. The equipment's ability to control smoke is observed before the permit is issued.

A Health Department permit fee is not required for pits that are not approved.

(4) PROCEDURE FOR DAYS YOU BURN

During the permit period, the jurisdictional Fire Department must be notified each day before burning begins and again when burning ends for the day. The Fire Department telephone number is written at the bottom of the permit.

Arlington Fire Department	867-8905
Bartlett Fire Department	385-5536 or 385-6412
Collierville Fire Department	853-3238
Germantown Fire Department	757-7269
Memphis Fire Department	320-5401 or 320-5422
Millington Fire Department	872-7851
Shelby County Fire Department	385-5100
Memphis & Shelby County Health Dept. Air Pollution Control	544-7349 or 544-7775
National Weather Service	544-0399

Burning normally takes place during daylight hours for fire safety and to protect the workers charging the burn pit. **Someone must be at the site to monitor the pit when burning is taking place.** Operation of the blower should continue until the fire has burned down completely and a fence or barrier should be placed completely around the pit or the pit completely filled and covered with dirt prior to leaving the site. A metal fence is required for the prevention of mishaps such as falling into unfilled pits. A wooden fence is unacceptable.

(5) PROBLEMS SOMETIMES ENCOUNTERED WITH BURN PITS

A permit is issued for a particular pit. If a pit is moved, another inspection, permit, and fee are required for the new pit, even if both pits are on the same construction site.

A pit too long for the air curtain or wider than the permit specifications will have to be filled and replaced with another pit.

Burning must take place below the air curtain. Overfilled pits tend to smoke and release fly ash which are the most common citizen complaints.

Additional restrictions, such as limited burning hours and days or the presence of a water truck on-site may be imposed based on the site's location and distance to the nearest water hydrant. Wind speed and direction limitations may also be imposed, either at the time the permit is issued or as a result of citizen complaints. Weather conditions are available from the National Weather Service at 544-0399.

Occasionally, a permit cannot be issued because of the small size of the site or the site's proximity to occupied residences, schools, nursing homes, hospitals, airports, or major roadways. the presence of overhanging trees or other flammable material may also prevent the issuance of a permit. No standing timber or overhead electrical lines are permitted within one hundred (100) feet of the burn pit.

Ideal locations for pits are at least:

- » five hundred (500) feet away from any primary or secondary highway
- » one thousand (1,000) feet from any school or residence not on the same property as the pit, or
- » One half (1/2) mile from any airport, nursing home or hospital

Burning is to be conducted when ambient conditions ensure maximum dispersion of smoke. Burning should not be conducted during any declared air pollution episode in the area of the burn.

Permits are also occasionally revoked because of substantiated complaints regarding excessive smoke or fly ash due to improper burn pit operation. The Health Department is authorized to fine violators of permit conditions up to a maximum of twenty-five thousand dollars (\$25,000) per violation.

Use of common sense will help avoid most of the problems and complaints associated with burn pit operation.

Please direct any questions to the Memphis & Shelby County Health Department, Air Pollution Control Section, Field Services Branch at (901)544-7349 or (901)544-7775.